IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Brockhaus et al.

Application No.: 08/444,790 Art Unit: 1646

Filed: May 19, 1995 Examiner: J. Murphy

For: HUMAN TNF RECEPTOR

DECLARATION UNDER 37 C.F.R. § 1.132 OF MS. TERRI DAVIS-SMITH

Commissioner for Patents
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Alexandria, VA 22313-1450

I, Terri Davis-Smith, do hereby declare as follows that:

1. I, Terri Davis-Smith, was employed at Immunex Corporation from October 27, 1986 through July of 2002, when Immunex was acquired by Amgen Inc. My job title at Immunex prior to the acquisition was Senior Research Associate. I have since worked as an Associate Scientist I at Amgen. Exhibits F contains copies of pages from my lab notebooks, which I recorded in the course of my employment at Immunex. In 1990 and 1991, my name was Terri Davis.

2. During the summer of 1990, one of my duties at Immunex was to perform TNF binding inhibition assays. Exhibit F documents the following experiments, which I performed during that time. On July 11, 1990, I tested a sample that I recorded in my lab notebook as "TNF R Ic COS supernatant DMEM 10% FCS + azide 6.25.90" (page 2 of Exhibit F) for inhibition of binding of radioactive TNF to U937 cells (which express a TNF receptor). It was my usual practice to write in my lab notebook what was labeled on sample tubes I was given to test. Therefore, I believe that "TNF R Ic COS supernatant DMEM 10% FCS + azide 6.25.90" (page 2 of Exhibit F) or "TNFr Fc COS Supe

6.25.90." (pages 4 and 6 of Exhibit F) was written on one of the samples I tested as described below.

3. A number of different samples were tested in the assay described in Exhibit F. Among the samples included in this test are the following:

(a) samples 1-6 (page 3 of Exhibit F, which correspond to samples 1-3 on page 5 of Exhibit F), radioactive TNF without a competitor;

(b) samples 7-12 (page 3 of Exhibit F, which correspond to samples 4-6 on page 5 of Exhibit F), radioactive TNF plus a 200-fold excess of non-radioactive, purified TNFα;

(c) samples 51-52 (page 4 of Exhibit F, also labeled with a circled "20," which correspond to sample 26 on page 6 of Exhibit F), radioactive TNF plus a 10-fold concentrated cell supernatant from cells transfected with an empty vector;

(d) samples 53-54 (page 4 of Exhibit F, also labeled with a circled "21," which correspond to sample 27 on page 6 of Exhibit F), radioactive TNF plus a 10-fold concentrated cell supernatant from cells transfected with a vector containing a soluble fragment of TNFR (the same cells transfected on the same day as those in sample 26); and

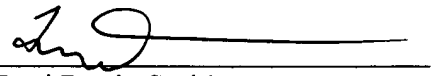
(e) samples 57-58 (page 4 of Exhibit F, also labeled with a circled "23," which correspond to sample 29 on page 6 of Exhibit F), radioactive TNF plus a sample recorded as "TNFr Fc COS Supe 6.25.90." I believe that samples 26 (page 6 of Exhibit F) and 27 (page 6 of Exhibit F) were produced at Immunex.

4. In a binding assay like that shown in Exhibit F, non-radioactive TNF would be expected to compete with the radioactive TNF, thus reducing the binding of the radioactive TNF to TNF receptors expressed on the U937 cell surface. Similarly, a TNF binding protein, such as a TNF receptor, would be expected to compete with TNF receptors on the surface of the U937 cells, thus reducing the amount of binding of radioactive TNF to the surface of the U937 cells. The results of the assay that pertain to the sample recorded as "TNFr Fc COS Supe 6.25.90" (pages 4 and 6 of Exhibit F) are summarized in the table below and reported on pages 3-7 of Exhibit F.

Sample No.	Sample recorded as	Radioactive Counts	Percent Inhibition
1-3 (page 5)	B. M. only (as labeled on page 3)	9802.3	0%
4-6 (page 5)	+ huTNFα 200x excess (as labeled on page 3)	659.5	100%
26 (page 6)	CAV conc. 10X 6.18.90 (as labeled on pages 4 and 6)	8355.0	16%
27 (page 6)	sol. HuTNFr conc. 10X 6.18.90 (as labeled on pages 4 and 6)	2507.5	80%
29 (page 6)	TNFr Fc COS supe 6.25.90 (as labeled on pages 4 and 6)	7681.5	23%

5. I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the above-identified application or any patent issuing thereon.

Date 12/8/05

Signed 

Terri Davis-Smith